Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A semiconductor device, comprising~~:~~

~~———————~~a diode~~,~~ including~~:~~

~~———————————~~a p-type silicon layer, the p-type silicon layer ~~including implanted~~containing germanium~~;~~, and

~~———————————~~a n-type silicon layer junctioned to the p-type silicon layer and the n-type silicon layer being disposed on an insulating substrate.

2. (Original) A semiconductor device, comprising:

a diode, including:

a p-type silicon layer, the p-type silicon layer containing germanium;

an intrinsic silicon layer junctioned to the p-type silicon layer; and

a n-type silicon layer junctioned to the intrinsic silicon layer.

3. (Canceled)

4. (Original) The semiconductor device according to claim 1, having a plurality of diodes, and further comprising:

a bridge-rectifier circuit comprising the diodes, and rectifying a predetermined alternating-current voltage to a direct-current voltage.

5. (Original) The semiconductor device according to claim 4, comprising:

a coil antenna coupled to one side of the bridge-rectifier circuit; and

a smoothing capacitor coupled to the other side of the bridge-rectifier circuit,

the coil antenna generating an alternating-current voltage by electromagnetic induction;

the bridge-rectifier circuit rectifying the alternating-current voltage supplied thereto into a direct-current voltage; and

the smoothing capacitor smoothing the direct-current voltage supplied thereto into a constant voltage.

6. (Original) A method of manufacturing a semiconductor device with a diode having a p-type silicon layer and a n-type silicon layer junctioned to the p-type silicon layer, comprising:

forming silicon-germanium mixed crystal by implanting germanium to the p-type silicon layer.

7. (Original) The semiconductor device according to claim 2, the diode being disposed on one of an insulating substrate and an insulation layer.

8. (Original) The semiconductor device according to claim 2, having a plurality of diodes, and further comprising:

a bridge-rectifier circuit comprising the diodes, and rectifying a predetermined alternating-current voltage to a direct-current voltage.

9. (New) A semiconductor device according to claim 1, the p-type silicon layer and the n-type silicon layer contacting the insulating substrate.

10. (New) A semiconductor device according to claim 2, the p-type silicon layer, the n-type silicon layer and the intrinsic silicon layer being disposed on an insulating substrate.

11. (New) A semiconductor device according to claim 10, the p-type silicon layer, the n-type silicon layer and intrinsic silicon layer contacting the insulating substrate.